

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Patent Application of:	)	<b>Mail Stop Appeal Brief - Patents</b>
	)	
Eral FOXENLAND	)	Group Art Unit: 2181
	)	
Application No.: 10/573,978	)	Examiner: W. Treat
	)	
Filed: November 17, 2006	)	
	)	
For: DEVICE AND METHOD FOR	)	
RENDERING DATA	)	

**APPEAL BRIEF**

U.S. Patent and Trademark Office  
Customer Window, Mail Stop Appeal Brief - Patents  
Randolph Building  
401 Dulany Street  
Alexandria, Virginia 22314

Sir:

This Appeal Brief is submitted in response to the final Office Action, dated November 13, 2008, and in support of the Notice of Appeal and Pre-Appeal Brief Request for Review, filed February 13, 2009. This Appeal Brief is also being submitted in response to the Notice of Panel Decision from Pre-Appeal Brief Review, dated May 6, 2009.

I. **REAL PARTY IN INTEREST**

The real party in interest in this appeal is Sony Ericsson Mobile Communications AB.

II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

Appellant is unaware of any related appeals, interferences, or judicial proceedings.

III. STATUS OF CLAIMS

Claims 1-22 are pending in the application.

Claims 1-22 were rejected in the final Office Action, dated November 13, 2008, and are the subject of the present appeal. These claims are reproduced in the Claim Appendix of the Appeal Brief.

IV. STATUS OF AMENDMENTS

Appellant filed a Notice of Appeal and Pre-Appeal Brief Request for Review on February 13, 2009, subsequent to the final Office Action, dated November 13, 2008. The Examiner issued a Notice of Panel Decision from Pre-Appeal Brief Review on May 6, 2009. No Amendment has been filed subsequent to the final Office Action.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

In the paragraphs that follow, a concise explanation of the independent claims, the dependent claims argued separately, and the claims reciting means-plus-function or step-plus-function language that are involved in this appeal will be provided by referring, in parenthesis, to examples of where support can be found in the specification and drawings.

Claim 1 is directed to a method (e.g., Fig. 3a; page 12, lines 28-29) for executing a first and a second sequence of digital data in an electronic device (e.g., Fig. 1, 1; page 5, lines 27-28)

configured to render the digital data on a display (e.g., Fig. 1, 20; page 7, line 35 – page 8, line 1), the electronic device having an input interface (e.g., Fig. 2, 100; page 7, line 35 – page 8, line 1) comprising at least one input means (e.g., Fig. 2, 10, 11, 12, 13, 14, 15, 23; page 6, lines 19-23; page 9, lines 15-16). The method comprises initiating (e.g., Fig. 3a, 200; page 12, lines 29-30) and executing (e.g., Fig. 3a, 210; page 13, lines 3-4) a main sequence of digital data; sensing activation of at least one input means (e.g., Fig. 3a, 220; page 13, lines 10-11) during execution of the main sequence; interrupting execution of said main sequence (e.g., Fig. 3a, 240; page 13, lines 1-21) in response to said sensing; and initiating and executing at least one sub sequence of digital data (e.g., Fig. 3a, 260; page 14, lines 1-2) when execution of the main sequence is interrupted, said sub sequence being associated with said main sequence.

Claim 3 recites that the initiating and executing at least one sub sequence of digital data comprises setting a resume flag at a position of the main sequence where execution of the main sequence was interrupted (Fig. 3a, 240; page 13, lines 22-25); and when the execution of the sub sequence is completed, resuming execution of the main sequence at said position (Fig. 3a, 270; page 14, lines 5-8).

Claim 10 is directed to an electronic device (e.g., Fig. 1, 1; page 5, lines 27-28) configured to render digital data on a display (e.g., Fig. 1, 20; page 7, line 35 – page 8, line 1). The electronic device comprises an input interface (e.g., Fig. 2, 100; page 7, line 35 – page 8, line 1) having at least one input means (e.g., Fig. 2, 10, 11, 12, 13, 14, 15, 23; page 6, lines 19-23; page 9, lines 15-16); and an output interface (e.g., Fig. 2, 100; page 7, lines 34-35) comprising an initiation unit (e.g., Fig. 2, 131; page 15, lines 17-18) configured to initiate execution of a main sequence of digital data, a sensing unit (e.g., Fig. 2, 140; page 11, lines 17-

19) configured to sense the activation of at least one input means, and an interrupt unit (e.g., Fig. 2, 132; page 15, lines 19-20) configured to interrupt execution of said main sequence, wherein the initiation unit is further configured to initiate execution of at least one sub sequence of digital data when the interrupt unit has interrupted the execution of the main sequence, said sub sequence being associated with the main sequence (page 2, lines 23-26).

Claim 12 is directed to the device according to claim 10, further comprising a counter (Fig. 2, 170) configured to count the number of executed iterations of the main sequence, or to determine a time period during which the main sequence has been executed, and wherein the interrupt unit is configured to interrupt execution of the main sequence when a predetermined number of iterations or a predetermined time period has been reached (page 11, lines 9-16).

Claim 18 is directed to a computer program product embodied on a computer readable storage medium (Fig. 2, 150; page), comprising computer readable instructions for carrying out a method (e.g., Fig. 3a; page 12, lines 28-29) when executed by a processing device (e.g., Fig. 2, line 130). The method comprises initiating (e.g., Fig. 3a, 200; page 12, lines 29-30) and executing (e.g., Fig. 3a, 210; page 13, lines 3-4) a main sequence of digital data; sensing activation of at least one input during execution of the main sequence (e.g., Fig. 3a, 220; page 13, lines 10-11); interrupting execution of said main sequence (e.g., Fig. 3a, 240; page 13, lines 1-21) in response to said sensing; and initiating and executing (e.g., Fig. 3a, 260; page 14, lines 1-2) at least one sub sequence of digital data when execution of the main sequence is interrupted, said sub sequence being associated with said main sequence.

Claim 22 recites that the input interface is configured to allow the user to select one of a plurality of sub sequences to be executed in response to the first input.

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

A. Claims 1, 2, 4-11, and 13-22 stand rejected under 35 U.S.C. § 102(b) as being anticipated by MASUYAMA et al. (U.S. Patent Application Publication No. 2004/0029640).

B. Claim 12 stands rejected under 35 U.S.C. § 103(a) as unpatentable over MASUYAMA et al.

C. Claim 3 stands rejected under 35 U.S.C. § 103(a) as unpatentable over MASUYAMA et al. in view of MANKOVITZ (PCT Publication No. WO 98/48566).

VII. ARGUMENT

**A. The Rejection of Claims 1, 2, 4-11, and 13-22 under 35 U.S.C. § 102(b) Based on MASUYAMA et al. Should Be Reversed.**

The initial burden of establishing a prima facie basis to deny patentability to a claimed invention is always upon the Examiner. In re Oetiker, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). A proper rejection under 35 U.S.C. § 102 requires that a single reference teach every aspect of the claimed invention. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 2 USPQ2d 1051 (Fed. Cir. 1987). Any feature not directly taught must be inherently present. Id. In other words, the identical invention must be shown in as complete detail as contained in the claim. Richardson v. Suzuki Motor Co., 868 F.2d 1226, 9 USPQ2d 1913 (Fed. Cir. 1989).

**1. Claims 1, 2, and 4-9**

Independent claim 1 is directed to a method for executing a first and a second sequence of digital data in an electronic device configured to render the digital data on a display, the electronic device having an input interface comprising at least one input means. The method

comprises initiating and executing a main sequence of digital data; sensing activation of at least one input means during execution of the main sequence; interrupting execution of said main sequence in response to said sensing; and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, said sub sequence being associated with said main sequence. One or more of these features is not disclosed or suggested by MASUYAMA et al.

For example, MASUYAMA et al. does not disclose or suggest interrupting execution of a main sequence of digital data in response to sensing (activation of at least one input means during execution of the main sequence), and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, said sub sequence being associated with said main sequence. The Examiner does not specifically address these features of claim 1, and instead generally cites to paragraphs 98-101, 156, and 217-245 and Figs. 3, 37, and 60-67 of MASUYAMA et al. in support of the allegation that MASUYAMA et al. anticipates claim 1. Applicant disagrees with the Examiner's interpretation of MASUYAMA et al.

Paragraphs 98-101 of MASUYAMA et al. describe Fig. 3, and disclose:

FIG. 3 is a block diagram of the portable game apparatus. The game machine main body 10 incorporates a board 27 therein. The board 27 is mounted with a CPU 21. The CPU 21 is connected with a LCD driver 22, an operation key 13, a sound generator circuit 23, a communication interface 24, a display RAM 156 and a work RAM 26. The sound generator circuit 23 is connected with a speaker 16. The communication interface 24 is to be connected to another portable game apparatus 40 through a connector 15 and communication cable 50. Note that, although the communication method with the other portable game apparatus 40 was shown by a method using the communication cable 50, it may use radio communication, handy phone or the like.

The cartridge 30 incorporates a board 36. The board 36 is mounted with a program ROM 34 storing a game program and game data, hereinafter described with reference to FIG. 16, and a backup RAM 35 storing a game data, hereinafter described with reference to FIG. 19. In addition to these storage means, the cartridge 30 includes, as one example of detecting means for detecting tilt, movement and impact to the portable game apparatus main body, an XY-axis acceleration sensor 31 to detect accelerations in X-axis and Y-axis directions and a Z-axis contact switch 32 to detect an acceleration in a Z-axis direction. Also, the cartridge 30 includes a sensor interface 33 as an interface to the acceleration detecting means. Where using a triaxial acceleration sensor capable of detecting accelerations in all the X-axis, Y-axis and Z-axis directions, the Z-axis contact switch 32 will be unnecessary. Incidentally, the biaxial acceleration sensor (XY-axis acceleration sensor) is more inexpensive than that sensor. Because this embodiment does not require high accuracy of acceleration detection in the Z-axis direction, a Z-axis contact switch 32 is employed that is simple in structure and cheap in price. Also, where high accuracy is not required in the XY-axis direction, detecting means having a similar structure to the Z-axis contact switch may be used in detecting an acceleration in the XY-axis direction.

The program ROM 34 is stored with a game program to be executed by a CPU 21. The work RAM 26 is stored with temporary data required to execute the game program. The backup RAM 35 is to store game data to be kept memorized even where a power to the portable game apparatus be turned off. The display data obtained through executing the game program by the CPU 21 is stored in the display RAM 25, which can be displayed on the LCD 12 through a LCD driver 22. Similarly, the sound data obtained through executing the game program by the CPU 21 is delivered to the sound generator circuit 23 so that sound is generated as effected sound through the speaker 16. Operation switches 13 are for game operation. However, the operation key 13 is auxiliary one as far as the present embodiment is concerned. The player is allowed to operate for game play principally by tilting or moving or giving impact to the portable game apparatus. The tilt, movement and impact to the portable game apparatus during game operation are to be detected by the XY-axis acceleration sensor 31 and Z-axis contact switch 12. The CPU 21 can execute the game program by utilizing the output values of the acceleration detecting means.

For a game with using a plurality of portable game apparatuses, the data obtained through executing a game program by the CPU 21 is delivered to the communication interface 24 and then sent to another portable game apparatus 40 via the connector 15 and communication cable 50. Meanwhile, the game data of the other portable game apparatus 40 comes to the CPU 21 through the communication cable 50, connector 15 and communication interface 24.

This section, in connection with Fig. 3 of MASUYAMA et al., discloses that a portable game apparatus main body 10 includes a CPU 21 that executes a game program based on output values of an acceleration detecting means—in a game cartridge 30 having one or more directional acceleration sensors 31, 32 and a sensor interface 33—for detecting tilt, movement, and impact to portable game apparatus main body 10 during game play. MASUYAMA et al.'s execution of a game program based on output values of an acceleration detecting means that detects tilt, movement, and impact to a portable game apparatus during game play cannot reasonably be construed as corresponding to executing a sub sequence of digital data when execution of a main sequence (with which the sub sequence is associated) is interrupted, as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 1. Instead, MASUYAMA et al.'s use of sensed data related to the detected tilting, movement, and impact to its portable game apparatus during game play constitutes real-time processing for concurrently executing game operation processes. In contrast, claim 1 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data is not concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest interrupting execution of a main sequence of digital data in response to sensing (activation of at least one input means during execution of the main sequence), and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, as recited in claim 1.



Paragraph 156 of MASUYAMA et al. describes Fig. 37, and discloses:

FIG. 37 shows a flowchart of a collision process. In steps S271 to S275, an NPC collision determination process is carried out. The NPC collision determination process is repeated to the number of NPCs. In step S271 it is determined whether an NPC has collided with a wall or not. If determined as collision with a wall, the process proceeds to step S273. If no collision is determined, the process advances to step S272 wherein it is determined whether there has been a collision with another NPC or not. If determined as collision with another NPC, the process advances to step S273. If determined as no collision with another NPC, the process proceeds to step S273. Where determined as a collision with a wall or another NPC, then in step S273 an impact sound is generated and then in step S274 the NPC coordinate (X, Y, Z) is returned to the last-time coordinate (Px, Py, Pz), and the process advances to the step S275.

This section, in connection with Fig. 37 of MASUYAMA et al., discloses that a collision process includes a non-player character (NPC) collision determination loop in which, when an NPC collides with a wall (S271) or another NPC (S272), an impact sound is generated (S273) and the NPC coordinate (X, Y, Z) is returned to the last-time coordinate (S274). MASUYAMA et al.'s steps of generating an "impact sound" and/or returning the NPC to the "last-time coordinate" cannot reasonably be construed as corresponding to executing a sub sequence of digital data when execution of a main sequence (with which the sub sequence is associated) is interrupted, as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 1. Instead, MASUYAMA et al.'s impact sound generation and NPC return to the last-time coordinate constitute real-time processing for concurrently executing game operation processes. In contrast, claim 1 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data is not concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this

section, or elsewhere, does MASUYAMA et al. disclose or suggest interrupting execution of a main sequence of digital data in response to sensing (activation of at least one input means during execution of the main sequence), and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, as recited in claim 1.

Paragraphs 217-245 of MASUYAMA et al. describe Figs. 60-68, and generally disclose a game in which a game space/scene (i.e., a simulated tilting maze plate) is shared by a master unit (i.e., portable game apparatus 10) and a slave unit (i.e., portable game apparatus 40) performing specific communication processes stored in game program memory that includes a communication interrupt program. This section of MASUYAMA et al. in now way relates to executing a sub sequence of digital data when execution of a main sequence (with which the sub sequence is associated) is interrupted—as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 1—let alone discloses or suggests interrupting execution of a main sequence of digital data in response to sensing (activation of at least one input means during execution of the main sequence), and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, as recited in claim 1.

MASUYAMA et al., at paragraphs 224-226, describes Fig. 61 and particularly discloses that portable game apparatus 10 executes a main routine that includes a display process (S83) loop in which game scenes are displayed on an LCD 12 and a collision process (S85p) is performed to collide the player character with a non-player character (NPC). MASUYAMA et al.'s step of performing a collision process (S85p) to collide the player character with an NPC cannot reasonably be construed as corresponding to executing a sub sequence of digital data

when execution of a main sequence (with which the sub sequence is associated) is interrupted, as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 1. Instead, MASUYAMA et al.'s collision process constitutes real-time processing for concurrently executing game operation processes. In contrast, claim 1 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data is not concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest interrupting execution of a main sequence of digital data in response to sensing (activation of at least one input means during execution of the main sequence), and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, as recited in claim 1.

MASUYAMA et al., at paragraphs 227-229, describes Fig. 62 and particularly discloses that portable game apparatus 40 executes a main routine that includes a display process (S83c) loop in which game scenes are displayed on an LCD 12; a sensor output read process reads an output value of an XY-axis acceleration sensor 31 and a Z-axis contact switch 32 through a sensor interface 33 (S83c); an interrupt signal and the acceleration-sensor output value are transmitted to portable game apparatus 10 (S85c); and a collision process is performed to collide the player character with an NPC (S87c). MASUYAMA et al.'s steps of transmission of an interrupt signal (S85c) and/or performing a collision process (S87c) cannot reasonably be construed as corresponding to executing a sub sequence of digital data when execution of a main sequence (with which the sub sequence is associated) is interrupted, as would be required of

MASUYAMA et al. based on the Examiner's apparent interpretation of claim 1. Instead, MASUYAMA et al.'s interrupt signal transmission and collision process constitute real-time processing for concurrently executing game operation processes. In contrast, claim 1 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data is not concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest interrupting execution of a main sequence of digital data in response to sensing (activation of at least one input means during execution of the main sequence), and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, as recited in claim 1.

MASUYAMA et al., at paragraph 232, describes Fig. 65 and particularly discloses execution of a communication interrupt process in which portable game apparatus 10 receives the interrupt signal the acceleration-sensor output value transmitted from portable game apparatus 40 (S91p); a sensor output read process reads an output value of XY-axis acceleration sensor 31 and Z-axis contact switch 32 through sensor interface 33 (S92p); composition is made of the two acceleration-sensor output values (S93p); and an interrupt signal and the composite data are transmitted to portable game apparatus 40 (S94p). MASUYAMA et al.'s steps of receipt/transmission of interrupt signals and/or reading sensor output cannot reasonably be construed as corresponding to executing a sub sequence of digital data when execution of a main sequence (with which the sub sequence is associated) is interrupted, as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 1. Instead,

MASUYAMA et al.'s interrupt signal receipt/transmission and sensor output reading constitute real-time processing for concurrently executing game operation processes. In contrast, claim 1 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data is not concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest interrupting execution of a main sequence of digital data in response to sensing (activation of at least one input means during execution of the main sequence), and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, as recited in claim 1.

MASUYAMA et al., at paragraph 233, describes Fig. 66 and particularly discloses execution of a communication interrupt process in which portable game apparatus 40 receives the composite data transmitted from the portable game apparatus 10, and the processing is ended. MASUYAMA et al.'s communication interrupt process cannot reasonably be construed as corresponding to executing a sub sequence of digital data when execution of a main sequence (with which the sub sequence is associated) is interrupted, as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 1. Instead, MASUYAMA et al.'s communication interrupt process apparently constitutes real-time processing for concurrently executing game operation processes. In contrast, claim 1 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data is not concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at

least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest interrupting execution of a main sequence of digital data in response to sensing (activation of at least one input means during execution of the main sequence), and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, as recited in claim 1.

MASUYAMA et al., at paragraph 234 describes Figs. 67 and 68 and particularly discloses that a player can control a game space displayed on a display device by tilting or applying a movement or impact to a controller, wherein simulation is provided to roll a ball on a plate such that tilting the controller to the right provides a tilt of the plate to the right to roll the ball to the right whereas tilting the controller to the left provides a tilt of the plate to the left to roll the ball to the left. MASUYAMA et al.'s process of controlling a displayed game space based on tilting or applying a movement or impact to a controller cannot reasonably be construed as corresponding to executing a sub sequence of digital data when execution of a main sequence (with which the sub sequence is associated) is interrupted, as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 1. Instead, MASUYAMA et al.'s game space simulation constitutes real-time processing for concurrently executing game operation processes. In contrast, claim 1 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data is not concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest interrupting execution of a main sequence of digital data in response to sensing

(activation of at least one input means during execution of the main sequence), and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, as recited in claim 1.

For at least these reasons, it is respectfully submitted that claim 1 is not anticipated by MASUYAMA et al. under 35 U.S.C. § 102. Reversal of the rejection of claim 1 is respectfully requested.

Claims 2 and 4-9 depend from claim 1. Claims 2 and 4-9 are, therefore, not anticipated by MASUYAMA et al. under 35 U.S.C. § 102 for at least the reasons given with regard to claim 1. Reversal of the rejection of claims 1, 2 and 4-9 is respectfully requested.

2. Claims 10, 11, 13-17, and 21

Independent claim 10 is directed to an electronic device configured to render digital data on a display. The electronic device comprises an input interface having at least one input means; and an output interface comprising an initiation unit configured to initiate execution of a main sequence of digital data, a sensing unit configured to sense the activation of at least one input means, and an interrupt unit configured to interrupt execution of said main sequence, wherein the initiation unit is further configured to initiate execution of at least one sub sequence of digital data when the interrupt unit has interrupted the execution of the main sequence, said sub sequence being associated with the main sequence. MASUYAMA et al. does not disclose one or more of the features recited in claim 10.

For example, MASUYAMA et al. does not disclose or suggest an output interface that comprises an initiation unit configured to initiate execution of a main sequence of digital data, a sensing unit configured to sense the activation of at least one input means, and an interrupt unit

configured to interrupt execution of said main sequence, wherein the initiation unit is further configured to initiate execution of at least one sub sequence of digital data when the interrupt unit has interrupted the execution of the main sequence, said sub sequence being associated with the main sequence. The Examiner does not specifically address these features of claim 10, and instead generally cites to paragraphs 98-101, 156, and 217-245 and Figs. 3, 37, and 60-67 of MASUYAMA et al. in support of the allegation that MASUYAMA et al. anticipates claim 10. Applicant disagrees with the Examiner's interpretation of MASUYAMA et al.

Paragraphs 98-101 of MASUYAMA et al., reproduced above, describe Fig. 3, and disclose that a portable game apparatus main body 10 includes a CPU 21 that executes a game program based on output values of an acceleration detecting means—in a game cartridge 30 having one or more directional acceleration sensors 31, 32—for detecting tilt, movement, and impact to portable game apparatus main body 10 during game play. MASUYAMA et al.'s execution of a game program based on output values of an acceleration detecting means that detects tilt, movement, and impact to a portable game apparatus during game play cannot reasonably be construed as corresponding to execution of at least one sub sequence of digital data when an interrupt unit has interrupted execution of a main sequence (with which the sub sequence is associated), as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 10. Instead, MASUYAMA et al.'s use of sensed data related to the detected tilting, movement, and impact to its portable game apparatus during game play constitutes real-time processing for concurrently executing game operation processes. In contrast, claim 10 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data



is not concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest that an output interface comprises an initiation unit configured to initiate execution of a main sequence of digital data, a sensing unit configured to sense the activation of at least one input means, and an interrupt unit configured to interrupt execution of said main sequence, wherein the initiation unit is further configured to initiate execution of at least one sub sequence of digital data when the interrupt unit has interrupted the execution of the main sequence, said sub sequence being associated with the main sequence, as recited in claim 10.

Paragraph 156 of MASUYAMA et al., reproduced above, describes Fig. 37, and discloses that a collision process includes a non-player character (NPC) collision determination loop in which, when an NPC collides with a wall (S271) or another NPC (S272), an impact sound is generated (S273) and the NPC coordinate (X, Y, Z) is returned to the last-time coordinate (S274). MASUYAMA et al.'s steps of generating an "impact sound" and/or returning the NPC to the "last-time coordinate" cannot reasonably be construed as corresponding to execution of at least one sub sequence of digital data when an interrupt unit has interrupted execution of a main sequence (with which the sub sequence is associated), as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 10. Instead, MASUYAMA et al.'s impact sound generation and NPC return to the last-time coordinate constitute real-time processing for concurrently executing game operation processes. In contrast, claim 10 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data is not

concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest that an output interface comprises an initiation unit configured to initiate execution of a main sequence of digital data, a sensing unit configured to sense the activation of at least one input means, and an interrupt unit configured to interrupt execution of said main sequence, wherein the initiation unit is further configured to initiate execution of at least one sub sequence of digital data when the interrupt unit has interrupted the execution of the main sequence, said sub sequence being associated with the main sequence, as recited in claim 10.

Paragraphs 217-245 of MASUYAMA et al. describe Figs. 60-68, and generally disclose a game in which a game space/scene (i.e., a simulated tilting maze plate) is shared by a master unit (i.e., portable game apparatus 10) and a slave unit (i.e., portable game apparatus 40) performing specific communication processes stored in game program memory that includes a communication interrupt program. This section of MASUYAMA et al. in now way relates to execution of at least one sub sequence of digital data when an interrupt unit has interrupted execution of a main sequence (with which the sub sequence is associated)—as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 10—let alone discloses or suggests that an output interface comprises an initiation unit configured to initiate execution of a main sequence of digital data, a sensing unit configured to sense the activation of at least one input means, and an interrupt unit configured to interrupt execution of said main sequence, wherein the initiation unit is further configured to initiate execution of at least one sub

sequence of digital data when the interrupt unit has interrupted the execution of the main sequence, said sub sequence being associated with the main sequence, as recited in claim 10.

MASUYAMA et al., at paragraphs 224-226, describes Fig. 61 and particularly discloses that portable game apparatus 10 executes a main routine that includes a display process (S83) loop in which game scenes are displayed on an LCD 12 and a collision process (S85p) is performed to collide the player character with a non-player character (NPC). MASUYAMA et al.'s step of performing a collision process (S85p) to collide the player character with an NPC cannot reasonably be construed as corresponding to execution of at least one sub sequence of digital data when an interrupt unit has interrupted execution of a main sequence (with which the sub sequence is associated), as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 10. Instead, MASUYAMA et al.'s collision process constitutes real-time processing for concurrently executing game operation processes. In contrast, claim 10 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data is not concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest that an output interface comprises an initiation unit configured to initiate execution of a main sequence of digital data, a sensing unit configured to sense the activation of at least one input means, and an interrupt unit configured to interrupt execution of said main sequence, wherein the initiation unit is further configured to initiate execution of at least one sub sequence of digital data when the interrupt

unit has interrupted the execution of the main sequence, said sub sequence being associated with the main sequence, as recited in claim 10.

MASUYAMA et al., at paragraphs 227-229, describes Fig. 62 and particularly discloses that portable game apparatus 40 executes a main routine that includes a display process (S83c) loop in which game scenes are displayed on an LCD 12; a sensor output read process reads an output value of an XY-axis acceleration sensor 31 and a Z-axis contact switch 32 through a sensor interface 33 (S83c); an interrupt signal and the acceleration-sensor output value are transmitted to portable game apparatus 10 (S85c); and a collision process is performed to collide the player character with an NPC (S87c). MASUYAMA et al.'s steps of transmission of an interrupt signal (S85c) and/or performing a collision process (S87c) cannot reasonably be construed as corresponding to execution of at least one sub sequence of digital data when an interrupt unit has interrupted execution of a main sequence (with which the sub sequence is associated), as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 10. Instead, MASUYAMA et al.'s interrupt signal transmission and collision process constitute real-time processing for concurrently executing game operation processes. In contrast, claim 10 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data is not concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest that an output interface comprises an initiation unit configured to initiate execution of a main sequence of digital data, a sensing unit configured to sense the activation of at least one input means, and

an interrupt unit configured to interrupt execution of said main sequence, wherein the initiation unit is further configured to initiate execution of at least one sub sequence of digital data when the interrupt unit has interrupted the execution of the main sequence, said sub sequence being associated with the main sequence, as recited in claim 10.

MASUYAMA et al., at paragraph 232, describes Fig. 65 and particularly discloses execution of a communication interrupt process in which portable game apparatus 10 receives the interrupt signal the acceleration-sensor output value transmitted from portable game apparatus 40 (S91p); a sensor output read process reads an output value of XY-axis acceleration sensor 31 and Z-axis contact switch 32 through sensor interface 33 (S92p); composition is made of the two acceleration-sensor output values (S93p); and an interrupt signal and the composite data are transmitted to portable game apparatus 40 (S94p). MASUYAMA et al.'s steps of receipt/transmission of interrupt signals and/or reading sensor output cannot reasonably be construed as corresponding to execution of at least one sub sequence of digital data when an interrupt unit has interrupted execution of a main sequence (with which the sub sequence is associated), as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 10. Instead, MASUYAMA et al.'s interrupt signal receipt/transmission and sensor output reading constitute real-time processing for concurrently executing game operation processes. In contrast, claim 10 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data is not concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest that an

output interface comprises an initiation unit configured to initiate execution of a main sequence of digital data, a sensing unit configured to sense the activation of at least one input means, and an interrupt unit configured to interrupt execution of said main sequence, wherein the initiation unit is further configured to initiate execution of at least one sub sequence of digital data when the interrupt unit has interrupted the execution of the main sequence, said sub sequence being associated with the main sequence, as recited in claim 10.

MASUYAMA et al., at paragraph 233, describes Fig. 66 and particularly discloses execution of a communication interrupt process in which portable game apparatus 40 receives the composite data transmitted from the portable game apparatus 10, and the processing is ended.

MASUYAMA et al.'s communication interrupt process cannot reasonably be construed as corresponding to execution of at least one sub sequence of digital data when an interrupt unit has interrupted execution of a main sequence (with which the sub sequence is associated), as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 10.

Instead, MASUYAMA et al.'s communication interrupt process apparently constitutes real-time processing for concurrently executing game operation processes. In contrast, claim 10 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data is not concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest that an output interface comprises an initiation unit configured to initiate execution of a main sequence of digital data, a sensing unit configured to sense the activation of at least one input means, and an interrupt unit configured to interrupt

execution of said main sequence, wherein the initiation unit is further configured to initiate execution of at least one sub sequence of digital data when the interrupt unit has interrupted the execution of the main sequence, said sub sequence being associated with the main sequence, as recited in claim 10.

MASUYAMA et al., at paragraph 234 describes Figs. 67 and 68 and particularly discloses that a player can control a game space displayed on a display device by tilting or applying a movement or impact to a controller, wherein simulation is provided to roll a ball on a plate such that tilting the controller to the right provides a tilt of the plate to the right to roll the ball to the right whereas tilting the controller to the left provides a tilt of the plate to the left to roll the ball to the left. MASUYAMA et al.'s process of controlling a displayed game space based on tilting or applying a movement or impact to a controller cannot reasonably be construed as corresponding to execution of at least one sub sequence of digital data when an interrupt unit has interrupted execution of a main sequence (with which the sub sequence is associated), as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 10. Instead, MASUYAMA et al.'s game space simulation constitutes real-time processing for concurrently executing game operation processes. In contrast, claim 10 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data is not concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest that an output interface comprises an initiation unit configured to initiate execution of a main sequence of digital data, a sensing unit configured to sense the activation of

at least one input means, and an interrupt unit configured to interrupt execution of said main sequence, wherein the initiation unit is further configured to initiate execution of at least one sub sequence of digital data when the interrupt unit has interrupted the execution of the main sequence, said sub sequence being associated with the main sequence, as recited in claim 10.

For at least these reasons, it is respectfully submitted that claim 10 is not anticipated by MASUYAMA et al. under 35 U.S.C. § 102. Reversal of the rejection of claim 10 is respectfully requested.

Claims 11, 13-17, and 21 depend from claim 10. Claims 11, 13-17, and 21 are, therefore, not anticipated by MASUYAMA et al. under 35 U.S.C. § 102 for at least the reasons given with regard to claim 10. Reversal of the rejection of claims 10, 11, 13-17, and 21 is respectfully requested.

3. Claim 22

Dependent claim 22 recites that the input interface is configured to allow the user to select one of a plurality of sub sequences to be executed in response to the first input.

Initially, claim 22 ultimately depends from claim 10. Therefore, claim 22 is not anticipated by MASUYAMA et al. under 35 U.S.C. § 102 for at least the reasons given with regard to claim 10.

Further, MASUYAMA et al. does not disclose or suggest that an input interface is configured to allow a user to select one of a plurality of sub sequences to be executed in response to a first input, as recited in claim 22. Even assuming, for the sake of argument, that MASUYAMA et al.'s steps of generating an "impact sound" and/or returning the NPC to the "last-time coordinate" could reasonably be construed as corresponding to execution of at least



one sub sequence of digital data (a point that Appellant does not concede for at least the reasons given above with respect to claim 10), MASUYAMA et al. does not disclose or suggest anything that can even remotely be construed as corresponding to the impact sound and/or returning the NPC to the last-time coordinate being selectable by a player, as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 22. Thus, nowhere does MASUYAMA et al. disclose or suggest that an input interface is configured to allow a user to select one of a plurality of sub sequences to be executed in response to a first input, as recited in claim 22.

For at least these reasons, it is respectfully submitted that claim 22 is not anticipated by MASUYAMA et al. under 35 U.S.C. § 102. Reversal of the rejection of claim 22 is respectfully requested.

4. Claims 18-20

Independent claim 18 is directed to a computer program product embodied on a computer readable storage medium, comprising computer readable instructions for carrying out a method when executed by a processing device. The method comprises initiating and executing a main sequence of digital data; sensing activation of at least one input during execution of the main sequence; interrupting execution of said main sequence in response to said sensing; and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, said sub sequence being associated with said main sequence. MASUYAMA et al. does not disclose one or more of the features recited in claim 18.

For example, MASUYAMA et al. does not disclose or suggest interrupting execution of a main sequence in response to sensing activation of at least one input during execution of the

main sequence; and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, said sub sequence being associated with said main sequence. The Examiner does not specifically address these features of claim 10, and instead generally cites to paragraphs 98-101, 156, and 217-245 and Figs. 3, 37, and 60-67 of MASUYAMA et al. in support of the allegation that MASUYAMA et al. anticipates claim 18. Applicant disagrees with the Examiner's interpretation of MASUYAMA et al.

Paragraphs 98-101 of MASUYAMA et al., reproduced above, describe Fig. 3, and disclose that a portable game apparatus main body 10 includes a CPU 21 that executes a game program based on output values of an acceleration detecting means—in a game cartridge 30 having one or more directional acceleration sensors 31, 32—for detecting tilt, movement, and impact to portable game apparatus main body 10 during game play. MASUYAMA et al.'s execution of a game program based on output values of an acceleration detecting means that detects tilt, movement, and impact to a portable game apparatus during game play cannot reasonably be construed as corresponding to initiating and executing at least one sub sequence of digital data when execution of a main sequence (with which the sub sequence is associated) is interrupted, as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 18. Instead, MASUYAMA et al.'s use of sensed data related to the detected tilting, movement, and impact to its portable game apparatus during game play constitutes real-time processing for concurrently executing game operation processes. In contrast, claim 18 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data is not concurrently executed with the main sequence; instead, execution of the main sequence

ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest interrupting execution of a main sequence in response to sensing activation of at least one input during execution of the main sequence; and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, said sub sequence being associated with said main sequence, as recited in claim 18.

Paragraph 156 of MASUYAMA et al., reproduced above, describes Fig. 37, and discloses that a collision process includes a non-player character (NPC) collision determination loop in which, when an NPC collides with a wall (S271) or another NPC (S272), an impact sound is generated (S273) and the NPC coordinate (X, Y, Z) is returned to the last-time coordinate (S274). MASUYAMA et al.'s steps of generating an "impact sound" and/or returning the NPC to the "last-time coordinate" cannot reasonably be construed as corresponding to initiating and executing at least one sub sequence of digital data when execution of a main sequence (with which the sub sequence is associated) is interrupted, as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 18. Instead, MASUYAMA et al.'s impact sound generation and NPC return to the last-time coordinate constitute real-time processing for concurrently executing game operation processes. In contrast, claim 18 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data is not concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest interrupting execution of a main

sequence in response to sensing activation of at least one input during execution of the main sequence; and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, said sub sequence being associated with said main sequence, as recited in claim 18.

Paragraphs 217-245 of MASUYAMA et al. describe Figs. 60-68, and generally disclose a game in which a game space/scene (i.e., a simulated tilting maze plate) is shared by a master unit (i.e., portable game apparatus 10) and a slave unit (i.e., portable game apparatus 40) performing specific communication processes stored in game program memory that includes a communication interrupt program. This section of MASUYAMA et al. in now way relates to initiating and executing at least one sub sequence of digital data when execution of a main sequence (with which the sub sequence is associated) is interrupted—as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 18—let alone discloses or suggests interrupting execution of a main sequence in response to sensing activation of at least one input during execution of the main sequence; and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, said sub sequence being associated with said main sequence, as recited in claim 18.

MASUYAMA et al., at paragraphs 224-226, describes Fig. 61 and particularly discloses that portable game apparatus 10 executes a main routine that includes a display process (S83) loop in which game scenes are displayed on an LCD 12 and a collision process (S85p) is performed to collide the player character with a non-player character (NPC). MASUYAMA et al.'s step of performing a collision process (S85p) to collide the player character with an NPC cannot reasonably be construed as corresponding to initiating and executing at least one sub

sequence of digital data when execution of a main sequence (with which the sub sequence is associated) is interrupted, as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 18. Instead, MASUYAMA et al.'s collision process constitutes real-time processing for concurrently executing game operation processes. In contrast, claim 18 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data is not concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest interrupting execution of a main sequence in response to sensing activation of at least one input during execution of the main sequence; and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, said sub sequence being associated with said main sequence, as recited in claim 18.

MASUYAMA et al., at paragraphs 227-229, describes Fig. 62 and particularly discloses that portable game apparatus 40 executes a main routine that includes a display process (S83c) loop in which game scenes are displayed on an LCD 12; a sensor output read process reads an output value of an XY-axis acceleration sensor 31 and a Z-axis contact switch 32 through a sensor interface 33 (S83c); an interrupt signal and the acceleration-sensor output value are transmitted to portable game apparatus 10 (S85c); and a collision process is performed to collide the player character with an NPC (S87c). MASUYAMA et al.'s steps of transmission of an interrupt signal (S85c) and/or performing a collision process (S87c) cannot reasonably be construed as corresponding to initiating and executing at least one sub sequence of digital data

when execution of a main sequence (with which the sub sequence is associated) is interrupted, as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 18. Instead, MASUYAMA et al.'s interrupt signal transmission and collision process constitute real-time processing for concurrently executing game operation processes. In contrast, claim 18 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data is not concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest interrupting execution of a main sequence in response to sensing activation of at least one input during execution of the main sequence; and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, said sub sequence being associated with said main sequence, as recited in claim 18.

MASUYAMA et al., at paragraph 232, describes Fig. 65 and particularly discloses execution of a communication interrupt process in which portable game apparatus 10 receives the interrupt signal the acceleration-sensor output value transmitted from portable game apparatus 40 (S91p); a sensor output read process reads an output value of XY-axis acceleration sensor 31 and Z-axis contact switch 32 through sensor interface 33 (S92p); composition is made of the two acceleration-sensor output values (S93p); and an interrupt signal and the composite data are transmitted to portable game apparatus 40 (S94p). MASUYAMA et al.'s steps of receipt/transmission of interrupt signals and/or reading sensor output cannot reasonably be construed as corresponding to initiating and executing at least one sub sequence of digital data

when execution of a main sequence (with which the sub sequence is associated) is interrupted, as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 18. Instead, MASUYAMA et al.'s interrupt signal receipt/transmission and sensor output reading constitute real-time processing for concurrently executing game operation processes. In contrast, claim 18 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data is not concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest interrupting execution of a main sequence in response to sensing activation of at least one input during execution of the main sequence; and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, said sub sequence being associated with said main sequence, as recited in claim 18.

MASUYAMA et al., at paragraph 233, describes Fig. 66 and particularly discloses execution of a communication interrupt process in which portable game apparatus 40 receives the composite data transmitted from the portable game apparatus 10, and the processing is ended. MASUYAMA et al.'s communication interrupt process cannot reasonably be construed as corresponding to initiating and executing at least one sub sequence of digital data when execution of a main sequence (with which the sub sequence is associated) is interrupted, as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 18. Instead, MASUYAMA et al.'s communication interrupt process apparently constitutes real-time processing for concurrently executing game operation processes. In contrast, claim 18

recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted. Thus, the at least one sub sequence of digital data is not concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest interrupting execution of a main sequence in response to sensing activation of at least one input during execution of the main sequence; and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, said sub sequence being associated with said main sequence, as recited in claim 18.

MASUYAMA et al., at paragraph 234 describes Figs. 67 and 68 and particularly discloses that a player can control a game space displayed on a display device by tilting or applying a movement or impact to a controller, wherein simulation is provided to roll a ball on a plate such that tilting the controller to the right provides a tilt of the plate to the right to roll the ball to the right whereas tilting the controller to the left provides a tilt of the plate to the left to roll the ball to the left. MASUYAMA et al.'s process of controlling a displayed game space based on tilting or applying a movement or impact to a controller cannot reasonably be construed as corresponding to initiating and executing at least one sub sequence of digital data when execution of a main sequence (with which the sub sequence is associated) is interrupted, as would be required of MASUYAMA et al. based on the Examiner's apparent interpretation of claim 18. Instead, MASUYAMA et al.'s game space simulation constitutes real-time processing for concurrently executing game operation processes. In contrast, claim 18 recites that at least one sub sequence of digital data is executed when execution of the main sequence is interrupted.



Thus, the at least one sub sequence of digital data is not concurrently executed with the main sequence; instead, execution of the main sequence ceases prior to execution of the at least one sub sequence of digital data. Thus, nowhere in this section, or elsewhere, does MASUYAMA et al. disclose or suggest interrupting execution of a main sequence in response to sensing activation of at least one input during execution of the main sequence; and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, said sub sequence being associated with said main sequence, as recited in claim 18.

For at least these reasons, it is respectfully submitted that claim 18 is not anticipated by MASUYAMA et al. under 35 U.S.C. § 102. Reversal of the rejection of claim 18 is respectfully requested.

Claims 19 and 20 depend from claim 18. Claims 19 and 20 are, therefore, not anticipated by MASUYAMA et al. under 35 U.S.C. § 102 for at least the reasons given with regard to claim 18. Reversal of the rejection of claims 18-20 is respectfully requested.

**B. The Rejection of Claim 12 under 35 U.S.C. § 103(a)  
Based on MASUYAMA et al. Should Be Reversed.**

The initial burden of establishing a prima facie basis to deny patentability to a claimed invention is always upon the Examiner. In re Oetiker, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In rejecting a claim under 35 U.S.C. § 103, the Examiner must provide a factual basis to support the conclusion of obviousness. In re Warner, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967). Based upon the objective evidence of record, the Examiner is required to make the factual inquiries mandated by Graham v. John Deere Co., 86 S.Ct. 684, 383 U.S. 1, 148

USPQ 459 (1966). KSR International Co. v. Teleflex Inc., 550 U.S. \_\_\_\_\_ (April 30, 2007).

The Examiner is also required to explain how and why one having ordinary skill in the art would have been led to modify an applied reference and/or combine applied references to arrive at the claimed invention. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988).

Dependent claim 12 recites a counter configured to count the number of executed iterations of the main sequence, or to determine a time period during which the main sequence has been executed, and wherein the interrupt unit is configured to interrupt execution of the main sequence when a predetermined number of iterations or a predetermined time period has been reached. The Examiner allegedly takes Official Notice that “timer/counter based interrupts are well known in the art. These are such a basic programming tools. Also, interrupts are merely a change of program flow device that can be used as a system manufacturer’s design requires. Application of basic tools like timers/counters, loops, and interrupts is merely a straightforward matter for one of ordinary skill and does not rise to the level of patentable differentiation” (final Office Action – paragraph 8).

Claim 12 depends from claim 10. Without concurring with the Examiner’s allegation, Appellant respectfully submits that the Examiner’s alleged Official Notice does not cure the deficiencies in the disclosure of MASUYAMA et al. identified above with respect to claim 10. Therefore, claim 12 is patentable over MASUYAMA et al. for at least the reasons given with regard to claim 10.

For at least these reasons, it is respectfully submitted that claim 12 is patentable over MASUYAMA et al. under 35 U.S.C. § 103. Reversal of the rejection of claim 12 is respectfully requested.

**C. The Rejection of Claim 3 under 35 U.S.C. § 103(a) Based on  
MASUYAMA et al. and MANKOVITZ Should Be Reversed.**

Dependent claim 3 recites that the initiating and executing at least one sub sequence of digital data comprises: setting a resume flag at a position of the main sequence where execution of the main sequence was interrupted; and when the execution of the sub sequence is completed, resuming execution of the main sequence at said position.

Claim 3 depends from claim 1. The disclosure of MANKOVITZ does not cure the deficiencies in the disclosure of MASUYAMA et al. identified above with regard to claim 1. For example, MANKOVITZ does not disclose or suggest interrupting execution of a main sequence of digital data in response to sensing (activation of at least one input means during execution of the main sequence), and initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, said sub sequence being associated with said main sequence as recited in claim 1. Therefore, claim 3 is patentable over MASUYAMA et al. and MANKOVITZ, whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 1.

For at least these reasons, it is respectfully submitted that claim 3 is patentable over MASUYAMA et al. and MANKOVITZ, whether taken alone or in any reasonable combination, under 35 U.S.C. § 103. Reversal of the rejection of claim 3 is respectfully requested.

VIII. CONCLUSION

In view of the foregoing arguments, Appellant respectfully solicits the Honorable Board to reverse the Examiner's rejections of claims 1-22.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

HARRITY & HARRITY, LLP

By: /Garth D. Richmond, Reg. No. 43,044/  
Garth D. Richmond  
Registration No. 43,044

11350 Random Hills Road  
Suite 600  
Fairfax, Virginia 22030  
(571) 432-0800  
CUSTOMER NUMBER: 58561

Date: June 8, 2009

IX. APPENDIX

1. A method for executing a first and a second sequence of digital data in an electronic device configured to render the digital data on a display, the electronic device having an input interface comprising at least one input means, the method comprising:

initiating and executing a main sequence of digital data;

sensing activation of at least one input means during execution of the main sequence;

interrupting execution of said main sequence in response to said sensing; and

initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, said sub sequence being associated with said main sequence.

2. The method according to claim 1, wherein the data type of the main sequence is the same as the data type of the sub sequence.

3. The method according to claim 1, wherein the initiating and executing at least one sub sequence of digital data comprises:

setting a resume flag at a position of the main sequence where execution of the main sequence was interrupted; and

when the execution of the sub sequence is completed, resuming execution of the main sequence at said position.

4. The method according to claim 1, wherein execution of the main sequence or the sub sequence is iterated a predetermined number of times or during a predetermined time period.

5. The method according to claim 1, wherein the input interface comprises a plurality of input means, the method further comprising:

identifying a specific input means or a combination of specific input means being activated; and

retrieving from a memory a particular sub sequence to be initiated, the particular sub sequence being associated with said identified specific input means or combination of specific input means.

6. The method according to claim 1, wherein the main sequence and the sub sequence comprise digital image or audio data.

7. The method according to claim 1, further comprising:

saving digital data comprising a main sequence identity, at least one position wherein the execution of the main sequence is to be interrupted and at least one identity of a sub sequence to be executed at said interruption.

8. The method according to claim 1, further comprising:

saving digital data of the main sequence and at least one sub sequence as they are rendered.

9. The method according to claim 7, further comprising:

transmitting said saved digital data to an external electronic device.

10. An electronic device configured to render digital data on a display, the electronic device comprising:

an input interface having at least one input means; and

an output interface comprising:

an initiation unit configured to initiate execution of a main sequence of digital data,

a sensing unit configured to sense the activation of at least one input means, and

an interrupt unit configured to interrupt execution of said main sequence,

wherein the initiation unit is further configured to:

initiate execution of at least one sub sequence of digital data when the interrupt unit has interrupted the execution of the main sequence, said sub sequence being associated with the main sequence.

11. The device according to claim 10, wherein the data type of the main sequence is the same as the data type of the sub sequence.

12. The device according to claim 10, further comprising:

a counter configured to count the number of executed iterations of the main sequence, or to determine a time period during which the main sequence has been executed, and

wherein the interrupt unit is configured to interrupt execution of the main sequence when a predetermined number of iterations or a predetermined time period has been reached.

13. The device according to claim 10, wherein the electronic device comprises a plurality of input means, a processor and a memory, the sensing unit being configured to identify a specific input means being activated, and

wherein the processor is adapted to retrieve from said memory a particular sub sequence to be initiated, the particular sub sequence being associated with said specific input means.

14. The device according to claim 10, further comprising:  
a memory configured to at least parts of said main sequence or parts of said sub sequence as they are rendered.

15. The device according to claim 14, further comprising:  
a communication unit configured to transmit said saved parts of the main sequence or the sub sequence.

16. The device according to claim 10, wherein the device is a mobile radio terminal, a pager, a communicator, an electronic organizer, or a smartphone.

17. The device according to claim 10, wherein the device is a mobile telephone.



18. A computer program product embodied on a computer readable storage medium, comprising computer readable instructions for carrying out a method when executed by a processing device, the method comprising:

initiating and executing a main sequence of digital data;  
sensing activation of at least one input during execution of the main sequence;  
interrupting execution of said main sequence in response to said sensing; and  
initiating and executing at least one sub sequence of digital data when execution of the main sequence is interrupted, said sub sequence being associated with said main sequence.

19. The device of claim 10, wherein the initiating unit is further configured to:  
execute the main sequence of digital data,  
output first moving images associated with the main sequence of digital data to the display,  
stop execution of the main sequence in response to a first input,  
execute the at least one sub sequence of digital data in response to the first input, and  
output second moving images associated with the at least one sub sequence of digital data to the display, the second moving images being different from the first moving images and being associated with the first moving images.

20. The electronic device of claim 19, wherein the input interface is configured to receive the first input from a user of the electronic device via a manual selection.

21. The device of claim 10, further comprising:

a speaker;

wherein the initiating unit is further configured to:

execute the main sequence of digital data,

output first audio data associated with the main sequence of digital data to the speaker,

stop execution of the main sequence in response to a first input,

execute the at least one sub sequence of digital data in response to the first input, and

output second audio data associated with the at least one sub sequence of digital data to the speaker, the second audio data being different from the first audio data and being associated with the first audio data.

22. The device of claim 21, wherein the input interface is configured to allow the user to select one of a plurality of sub sequences to be executed in response to the first input.

X. EVIDENCE APPENDIX

None

XI. RELATED PROCEEDINGS APPENDIX

None